Chairperson Bruce Flower And Members of the Planning Board 20 Middlebush Road Wappingers Falls, NY 12590

## SUBJECT: RF ENGINEERING RESPONSE TO MEMORANDUM OF OPPOSITION TO THE TARPON TOWERS APPLICATION TO CONSTRUCT A WIRELESS TELECOMMUNICATIONS FACILITY ON THE PROPERTY OF 110 CHELSEA ROAD IN THE TOWN OF WAPPINGER, NY

Honorable Chairman Flower and Members of the Planning Board:

This purpose of this report is to provide the Planning Board with my response to several RF Engineering-related points detailed in the Memorandum of Opposition received related to the Tarpon Towers application to install a 150 foot tall monopole on the property of 110 Chelsea Road in the town of Wappinger, NY. The document received and reviewed in preparation for this supplemental report included:

Memorandum of Opposition – Campanelli and Associates (June 3, 2020)

Within this document, there are four (4) assertions made in the Memorandum which I will address in this response:

- 1. "Hard data" (dropped calls, and drive test data) should be required and was not provided;
- 2. The maps provided are "manipulatable" and therefore not probative;
- 3. Verizon's response to my letter is deficient.
- 4. Verizon's contemporaneous website contradicts the information in the submittal

My responses to each of these four assertions is provided below.

- 1. The Applicant provided data taken from their network that details the performance issues present that would be addressed by the proposed site. The metrics provided (FDV, ASEU, AvgAC) are derived from measurements taken by the user's cell phones accessing (or trying to access) the Verizon network. The data is actually more valuable then drive test data as it includes many more measurements across the area, taken 24 x 7 x 365.
- 2. The coverage and best server maps provided are based on the propagation tool used by Verizon (ATOLL, I believe, which is widely utilized in the cellular industry). The tool is configured by the Verizon RF Engineers to provide an accurate representation of what the actual coverage would look like. Verizon tunes their propagation tools periodically, and they do a nice job of projecting the existing and expected coverage. Like any tool, it is possible to "manipulate" the parameters and cause changes in the projected coverage. It is highly unlikely that Verizon is doing this.
- 3. I disagree. They responded directly to my questions, both in writing and via a phone call with their RF Engineer. In my professional opinion, Verizon's response was thorough and complete.

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4. Coverage maps shown on Verizon's website are provided for marketing purposes and should not be interpreted as accurate representation of specific areas which may need coverage or capacity enhancement.

Please feel free to reach out to me with any questions or comments.

Sincerely,

Douglas Fishman RF Engineering Consultant (201) 218-6848